



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/565,836	01/25/2006	Noriki Fukunishi	19078-003US1 F05-053US	7651
26211 7590 07/18/2008 FISH & RICHARDSON P.C. P.O. BOX 1022 MINNEAPOLIS, MN 55440-1022			EXAMINER MUROMOTO JR, ROBERT H	
			ART UNIT 3765	PAPER NUMBER
			MAIL DATE 07/18/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

DETAILED ACTION

Claim Objections

Claims 17 and 18 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim.

Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

Instantly listed claims are process claims that improperly depend on a product claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-8 and 11-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over *New type sportswear fabrics "Zebra" from Toyobo and Itochu*, **JTN Monthly**, December 1, 2000 (Zebra herein) in view of instant Background of Invention.

Zebra teaches a fabric that exhibits the concept of "lighter, stronger, and more beautiful fabric a perennial goal for fabrics since the days when silk was riding high."

Zebra uses two yarns one a 30 denier (33 dtex) high multifilament textured yarn for the warp and a 37 denier (41 dtex) superhigh multifilament yarn; .2 denier (.3 dtex) per filament for the weft.

The major current (as of publication date 2000) fabrics are taffeta and ripstop densely weaving the yarns above. The warp density being 200yarns per inch and the weft density being 150 wefts per inch (warp to weft ratio 1.2).

The weight is ultra-light 56 grams per square meter for taffeta and 60grams per square meter for ripstop.

Tearing strength is 1900 g (18.6 N) in the warp and 1000g (9.8N) in the weft.

Zebra teaches 'despite being fine denier and high density fabrics, they maintain sufficient tearing strength because of a new way of finishing.'

Zebra teaches the fabric having air permeability of .6 cc/square cm/sec, giving the fabric 'downproofing' properties.

As for touch, Zebra offers adequate body, softness and a very light hand because of directly spun super high multifilament yarns

Zebra specifically teaches the claimed tear strength, air permeability, warp and weft density/ratio, and individual fiber fineness ranges as recited by instant claims.

The limitation with regards to single side calendaring is a product-by-process limitation. The MPEP is clear with respect to product-by-process limitations:

"the lack of physical description in a product-by-process claim makes determination of the patentability of the claim more difficult, since in spite of the fact that the claim may recite only process limitations, it is the patentability of the product claimed and not of the recited process steps which must be established. We are therefore of the opinion that when the prior art discloses a product which reasonably appears to be either identical with or only slightly different that a product claimed in a product-by-

process claim, **a rejection based on either section 102 or section 103 of the statute is eminently fair and acceptable**. As a practical matter, the Patent Office is not equipped to manufacture products by the myriad of processes put before it and then obtain prior art products and make physical comparisons therewith.” *In re Brown*, 459 F.2d 531, 535, 173 USPQ 685, 688 (CCPA 1972).”

“The Patent Office bears a lesser burden of proof in making out a case of prima facie obviousness for product-by-process claims because of their peculiar nature” than when a product is claimed in the conventional fashion. *In re Fessmann*, 489 F.2d 742, 744, 180 USPQ 324, 326 (CCPA 1974). **Once the examiner provides a rationale tending to show that the claimed product appears to be the same or similar to that of the prior art, although produced by a different process, the burden shifts to applicant to come forward with evidence establishing an unobvious difference between the claimed product and the prior art product**. *In re Marosi*, 710 F.2d 798, 802, 218 USPQ 289, 292 (Fed. Cir. 1983).”

In view of the similarities between the claimed fabric, and that of the prior art, it is reasonable to believe that the product made by the prior art process would be either identical to or only slightly different from the claimed product. In such a situation, the burden of proof shifts to applicant to prove that the claimed product is materially different.

The basis weight, thickness and yarn linear density taught by Zebra are only slightly different than those recited in the claims. Since the Zebra fabric is taught as one exhibiting "lighter, stronger and more beautiful fabrics" it is considered an obvious

variation to the Zebra fabric to produce a fabric with the slight variation in weight and yarn linear density claimed.

With regards to changes in size/proportion the MPEP is clear:

“Changes in Size/Proportion

In re Rose, 220 F.2d 459, 105 USPQ 237 (CCPA 1955) (Claims directed to a lumber package "of appreciable size and weight requiring handling by a lift truck" where held unpatentable over prior art lumber packages which could be lifted by hand because limitations relating to the size of the package were not sufficient to patentably distinguish over the prior art.); *In re Rinehart*, 531 F.2d 1048, 189 USPQ 143 (CCPA 1976) ("mere scaling up of a prior art process capable of being scaled up, if such were the case, would not establish patentability in a claim to an old process so scaled." 531 F.2d at 1053, 189 USPQ at 148.).

In *Gardner v. TEC Systems, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), *cert. denied*, 469 U.S. 830, 225 USPQ 232 (1984), the Federal Circuit held that, where the only difference between the prior art and the claims was a recitation of relative dimensions of the claimed device and a device having the claimed relative dimensions would not perform differently than the prior art device, the claimed device was not patentably distinct from the prior art device.”

Recited ‘bending rigidity’, fabric thickness, and lip width (ripstop design width) and cover factor are all fabric properties that are directly related to the fabric properties taught above in Zebra.

With respect to product by property type limitations, the MPEP is clear:

““PRODUCT AND APPARATUS CLAIMS - WHEN THE STRUCTURE RECITED IN THE REFERENCE IS SUBSTANTIALLY IDENTICAL TO THAT OF THE CLAIMS, CLAIMED PROPERTIES OR FUNCTIONS ARE PRESUMED TO BE INHERENT

Where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical

processes, a *prima facie* case of either anticipation or obviousness has been established. *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977). "When the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not (MPEP 2112.01)."

Since all structure and most material properties are taught by Zebra it follows that the fabric's bending rigidity, fabric thickness, lip width, and cover factor as recited in the claims are inherently present in the Zebra fabric.

Although Zebra teaches essentially all of the claimed limitations of the instant fabric, Zebra does not specifically recite the use of polyamide yarns in the production of the fabric.

However, the instant Background of Invention section admits that polyester multifilament (as in Zebra), nylon multifilament (polyamide) and composites thereof have been used commonly in sportswear having so-called 'downproofing' properties due to the intrinsic excellent mechanical properties of polyester and/or nylon.

Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to modify the Zebra fabric to use polyamide yarns rather than polyester yarns to produce a 'lighter, stronger, more beautiful fabric' that still retains appropriate strength to be used in sportswear applications that require a so-called 'downproofing' property.

Response to Arguments

Applicant's arguments filed 4/18/2008 have been fully considered but they are not persuasive.

Newly added MPEP citations clearly address arguments with regards to fabric dimension variables, measured properties, and product-by-process limitations.

Newly cited MPEP citations clearly address inherency arguments.

Since these are the arguments and amendments provided the rejections remain and are considered to be proper.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BOBBY H. MUROMOTO JR whose telephone number is (571)272-4991. The examiner can normally be reached on 8-530, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Welch can be reached on 571-272-4996. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Robert H Muromoto, Jr./
Primary Examiner, Art Unit 3765